

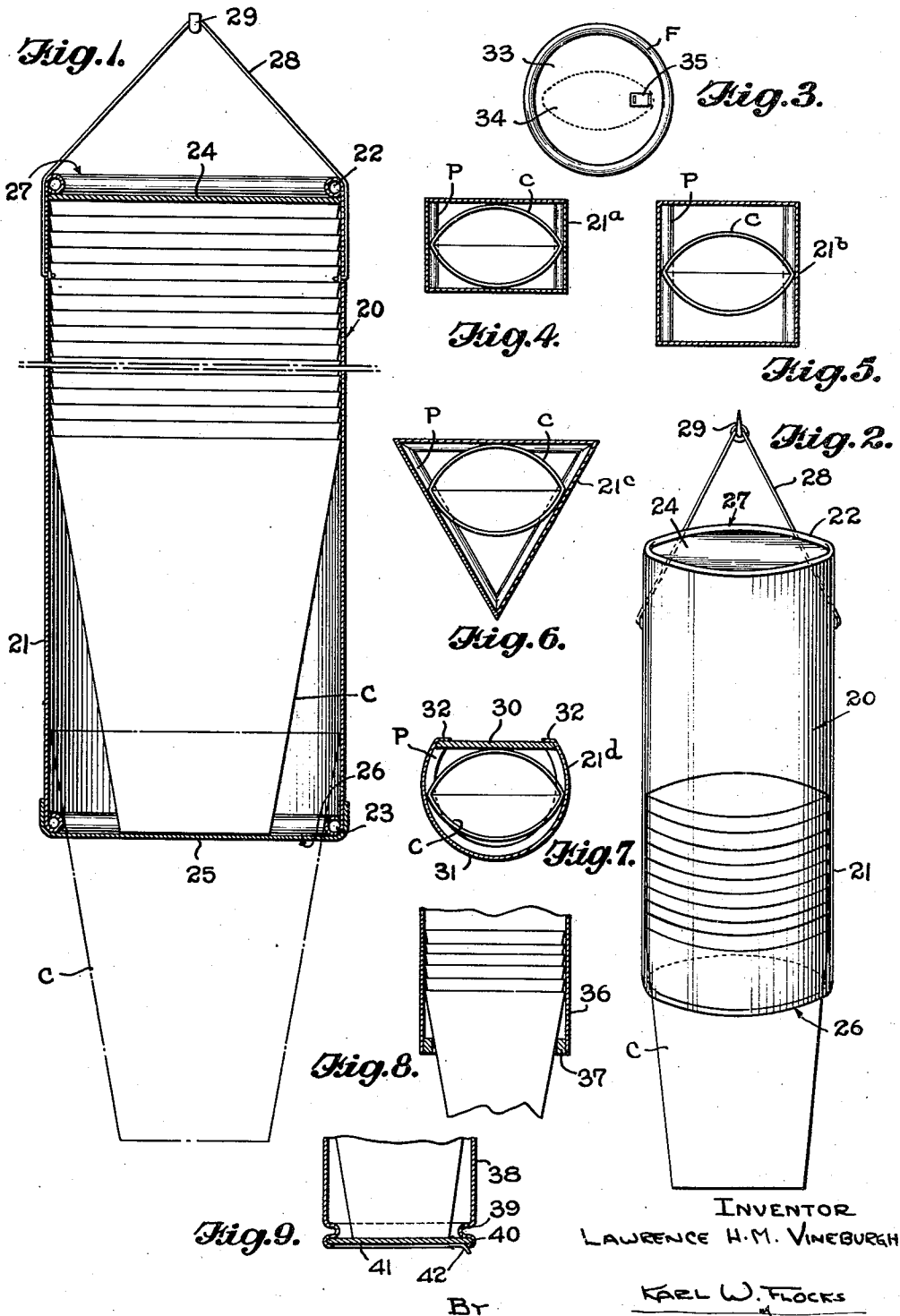
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COMBINED PACKAGE AND DISPENSER

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COMBINED PACKAGE AND DISPENSER

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1 Claim. (Cl. 206—56)

This invention relates to packaging and dispensing and more particularly to a combined sanitary cup package and dispenser.

Prior to the instant invention paper cups have been sold for domestic use in packages of various types. These packages have ranged from cartons made of cardboard to ordinary wrapping paper.

It is an object of the instant invention to provide a novel combined package and dispenser which may be readily and inexpensively fabricated of simple and available materials which will serve as a neat package for paper or sanitary disposable cups and which may be readily converted into a dispenser of a character which will dispense one cup at a time as needed while maintaining the remainder in clean and sanitary condition.

It is another object of the invention to provide a combined transparent package and dispenser for paper or other sanitary disposable cups.

Other objects and the nature and advantages of the invention will be apparent from the following description taken in conjunction with the accompanying drawing, wherein:

Fig. 1 is a transverse sectional view of a combined carton and dispenser in accordance with the invention and illustrating in broken lines one cup about to be dispensed after the bottom cap has been removed.

Fig. 2 is a view in perspective of the device illustrated in Fig. 1 with the bottom cap removed and with cups therein in dispensing relation.

Fig. 3 is a bottom view of a modified form of the invention illustrating a bottom cap having a removable weakened portion.

Fig. 4 is a horizontal section of another form of the device.

Fig. 5 is a view similar to Fig. 4 but of a modified form.

Fig. 6 is a view similar to Fig. 4 but of a modified form.

Fig. 7 is a view similar to Fig. 4 but of a modified form.

Fig. 8 is a fragmentary vertical sectional view illustrating a modified form of bottom cam and stop member.

Fig. 9 is a view similar to Fig. 8 illustrating a modified form of removable bottom cap.

Referring to Figs. 1 and 2, the combined carton and dispenser 20 comprises a generally tubular body portion 21 of transparent material such as cellulose acetate or other equivalent

transparent material which is rolled over at its ends 22 and 23 to provide a holding means for the upper disc-like cap 24 and a cam and stop means, at the lower end of the device, for the cups C. The lower end of the carton is adapted to be closed by a cap 25 which is generally dish-shaped in configuration and adapted to be slipped over the lower end 26 of the body portion 21. A supporting string may be associated with the walls of the body portion 21 adjacent the top 27 of the dispenser 20 to form a loop 28 by which the carton may be carried or associated with a wall hook 29 when the device is to be used as a cup dispenser.

The combined carton and dispenser 20 is adapted to house in sanitary condition a stack of cups therewithin until needed. These cups may be of generally elliptical or other geometrical horizontal section as better shown in Fig. 2 and may taper inwardly from top to bottom. Pressure on the side of the cup tends to increase the minor axis of the horizontal section and a combined pull at the bottom of the cup and pressure inwardly along the major axis of the horizontal section will dislodge the first cup to be dispensed from the remaining cups. This is accomplished by simply pulling the bottom of the cup and depending upon the camming action of the inwardly rolled portion 23 to effect pressure inwardly along the major axis of the generally elliptical section of the first cup to be dislodged which increases the minor axis and effects separation of said cup to be dispensed from the remainder of the stack. Further pull on the bottom of the first cup to be dispensed completely removes the said cup and the remainder of the said stack falls downwardly into position and presents a new outer cup to be dispensed when needed while maintaining the remainder of the stack within the body portion of the device in sanitary condition.

Not only may the body portion of the device be tubular as shown in Figs. 1 and 2 but it may be polygonal in section. In Fig. 4 the body portion 21a is rectangular in section; in Fig. 5 body portion 21b is of square section; in Fig. 6 body portion 21c is of polygonal section. In Fig. 7 body portion 21d is made up of a planular rear element 30 which may be of opaque material such as wood, plastic, or cardboard, and a generally circular transparent front portion 31 secured to the rear element 30 along integral flanges 32.

The device as illustrated in Figs. 4, 5, 6 and 7 all include at their bottom ends inwardly turned

cam portions P to effect the camming action already described in connection with Figs. 1 and 2.

Not only may the tubular body portion 21 of the combined device 20 illustrated in Figs. 1 and 2 be formed with a rolled portion 23 turned inwardly but the turned-in portion may be generally flat such as ordinary flange F, see Fig. 3. A simple cardboard closure 33 may be located inside of the flange F, which cardboard closure 33 may be formed with a weakened portion 34 of the proper dimension to effect the camming action described in connection with Figs. 1 and 2 and Figs. 4 to 7, inclusive. The weakened portion 34 may be provided with a tab 35 to facilitate its removal when the combined device is to be changed from an ordinary package housing the cups C to a cup dispenser.

Instead of utilizing an integral formation to effect the camming action at the bottom of the combined device, an ordinary cylinder or other tubular body portion 36, see Fig. 8, may be utilized together with an annular cam ring 37 associated with the bottom thereof. The annular cam ring is located interiorly of the body portion and may be held in place by friction or by other suitable fastening means. The interior of the annular cam ring is of such dimension as will effect the camming action described in connection with Figs. 1 and 2.

The camming ring 37 may be eliminated by utilizing a construction such as illustrated in Fig. 9. Here, a body portion 38 is formed at its bottom with an S-shape annular section 39. The S-shape annular section includes a concave portion 40 adapted to hold a removable bottom cap 41. To facilitate the removal of the bottom cap 40, a tab 42 is associated therewith. The convex portion of the annular S-shape formation is of such size as to effect the camming action which serves to release the cup to be dispensed from the remainder of the stack from falling through.

It will be apparent, that the constructions described are extremely desirable and that these ingenious devices will serve both as saleable cartons for stacked paper or other disposable cups which cartons in the home or elsewhere may further serve as a dispenser by the simple re-

moval of a bottom cap. The formation of the body portion or associated parts serves to successively dispense cups as needed when the user, after having removed the bottom cap, pulls on the bottom portion of the first cup.

It will be obvious to those skilled in the art that various changes may be made in this device without departing from the spirit of the invention and therefore the invention is not limited to what is shown in the drawing and described in the specification but only as indicated in the appended claim.

What is claimed is:

A carton-dispenser and cup-stack combination comprising a nested stack of partially opened envelope type cups having folded tapered sides and each comprising a top opening having a major axis and a minor axis, said stack being located in a housing comprising an elongated relatively thin walled, hollow, tubular, flexible body, said body having a top end and a bottom end, said top and bottom ends of said body being rolled inwardly so as to impart thereto the quality of rigidity at said top and bottom ends, the largest dimension in width of each of said cups corresponding to said major axis being greater than the largest dimension across the opening of the inwardly rolled ends so that the cups can not fall out through the top end when the tubular body is turned upside down, the dimension of said minor axis of each of said cups being smaller than the largest dimension across the opening of the inwardly rolled bottom end by an amount sufficient to permit distortion of the mouth of each cup as it is dispensed through said bottom end, said distortion taking place as the bottom of the cup is pulled through the bottom end of the tubular body which causes the major axis of the cup being dispensed to become smaller and the minor axis to become correspondingly larger, said inwardly rolled ends extending substantially continuously about the inner periphery of the top and bottom ends of said body and imparting to the body the quality of rigidity so as to properly support the cup-stack and effect proper dispensing action through the bottom end as described.

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